



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,090	11/16/2001	Stephen P. Vossler	P1758US00	4805

7590 12/21/2007
GATEWAY, INC.
Attention: Kenneth J. Cool
610 Gateway Drive, MD Y-04
N. Sioux City, SD 57049

EXAMINER

CHANKONG, DOHM

ART UNIT	PAPER NUMBER
----------	--------------

2152

MAIL DATE	DELIVERY MODE
-----------	---------------

12/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/991,090

Applicant(s)

VOSSLER, STEPHEN P.

Examiner

Dohm Chankong

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 4, 7, 11, 13, 15, 16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 7, 11, 13, 15, 16, and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1> This action is in response to Applicant's request for continued examination, filed on 10.5.2007. Claims 1, 7, 11, and 13 are amended. Claims 1, 3, 4, 7, 11, 13, 15, 16, and 18-21 are presented for further examination.

2> This is a non-final rejection.

Continued Examination Under 37 CFR 1.114

3> A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10.5.2007 has been entered.

Response to Arguments

4> Applicant's arguments with respect to claims 1, 3, 4, 7, 11, 13, 15, 16, and 18-21 have been considered but are moot in view of the new ground(s) of rejection necessitated by Applicant's amendment. Applicant also reiterates arguments with respect to claims 7, 13, and 21 that have already formally addressed by the previous examiner in his response, filed on 6.21.2007. For example, Applicant argues that the cited references do not disclose using file size, data rate and user preference. As discussed in the previous rejections, Van Leeuwen disclosed prioritizing data transfers based on data rate. The Pyhalammi references disclose relying on

user preference to prioritized data. And both Van Leeuwen and the newly cited reference in this action disclose prioritizing based on file size (see below). Thus, in combination, all three references disclose the limitation as claimed.

With respect to claim 21, Applicant also argues that Pyhalammi does not disclose Prioritizing of a first user of other users. As discussed by the previous examiner, the Van Leeuwen reference disclosed prioritizing users who were closer to the dead zone. Together, Van Leeuwen and Pyhalammi disclose the claimed limitation.

Claim Rejections - 35 USC § 112

I. Claims 1, 7, and 21 are presumed to invoke 35 U.S.C §112, sixth paragraph.

A claim limitation will be presumed to invoke 35 U.S.C. 112, sixth paragraph, if it meets the following 3-prong analysis: (A) the claim limitations must use the phrase "means for" or "step for;" (B) the "means for" or "step for" must be modified by functional language; and (C) the phrase "means for" or "step for" must not be modified by sufficient structure, material, or acts for achieving the specified function. MPEP §2181(I). With respect to the second and third prongs of the analysis, it must be clear that the element in the claims is set forth, at least in part, by the function it performs as opposed to the specific structure, material, or acts that perform the function. See id.

Here, claims 1, 7, and 21 raise a presumption that Applicant has invoked 35 U.S.C §112, sixth paragraph because they meet the 3-prong analysis. The claims clearly meet the first prong. Further, the "means for" are modified only by functional language. The claims do not recite any specific structure or material that perform the function.

Taking claim 1 as an example, the claim recites "means for": (1) establishing communications between a first and second network; (2) predicting a time period during which communications between the networks can be made; (3) transferring information between the networks so that the information transfer is completed within the time period; (4) determining whether a remaining time period exists; (5) selecting another file that is capable of being transferred within the remaining time period. All of these limitations are purely functional in nature and do not contain any specific structure or material that perform those functions. Thus, the second and third prongs of the analysis are met. Claims 1, 7, and 21 raise a presumption that Applicant has invoked 35 U.S.C §112, sixth paragraph.

II. Some of the "means for" limitations lack proper written description and therefore are rejected under 35 U.S.C. §112, second paragraph.

35 U.S.C. 112, sixth paragraph states that a claim limitation expressed in means-plus-function language "shall be construed to cover the corresponding structure...described in the specification and equivalents thereof." MPEP §2181(II). The proper test for meeting the definiteness requirement is that the corresponding structure of a means-plus-function limitation must be disclosed in the specification itself in a way that one skilled in the art will understand what structure will perform the recited function. Id.

For the reasons discussed below, one of ordinary skill in the art would not be able to identify the structure from description in the specification for performing the recited functions of predicting time periods, transferring information, determining whether a time period exists and selecting an additional information transfer. Applicant is required to amend the specification to include the material incorporated by reference and to clearly link or

associate the structure, material or acts to the function recited in the claim. MPEP §2181

(III)(B)(2).

Claims 1, 7 and 21 contain similar "means for" language and therefore the following analysis is applicable to all three claims. As to the "means for" establishing communications, Applicant's specification states that a "VAN 124 is capable of establishing communications with LAN 110 *via a wireless network communications medium 120 using corresponding transmission systems*" [Applicant's published application 2003/0097477, 0007].

As to the "means for" predicting a time period during which the communications between the networks can be made, Applicant's specification is silent as to any corresponding structure. Applicant discusses a hardware system (Figure 5) that can be used to "tangibly embody LAN 110" [0019]. However, Applicant does not describe any of the hardware components of the hardware system that performs the prediction function. Therefore, this "means for" lacks the necessary written description.

As to the "means for" transferring information between the networks, Applicant's specification is also silent as to any corresponding structure for performing the transferring function. Applicant's specification discusses in broad strokes that data is transferred from a vehicle to devices (PDAs, tools, phones) [007] and transferred from one network to another network [0008]. Again, Applicant describes how a hardware system could embody a network. But there is description of the hardware system that would be able to perform the transferring function. In fact, there aren't any elements in hardware system that are described to perform any network related functions. Thus, this "means for" lacks the necessary written description.

Applicant's specification is also silent as any structure that corresponds to either the "means for" determining whether a time period exists and selecting an additional information transfer of a size that can be transferred within the remaining time period.

III. Applicant's claims are therefore rejected under 35 U.S.C §112, second paragraph.

Therefore, claims 1, 3, 4, 7, 11, 13, 15, 16, and 18-21 are rejected under 35 U.S.C §112, second paragraph. Specifically, claims 1, 7, and 21 are rejected for lacking proper written description and therefore has failed to particularly point out and distinctly claim the invention as required. The dependent claims are rejected based on their dependency on their parent claims.

IV. Applicant's claims are also rejected under 35 U.S.C §112, first paragraph.

Claims 1, 3, 4, 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, claims 1 and 7 recite a predicting means that predicts a time period based on the file size, data rate and user preference. Applicant's specification describes a scheduling function that prioritizes the transfer of files based on file size, data rate, and user preference.

Applicant's specification does not describe in any way how to predict a remaining time period based on the recited criteria. One of ordinary skill in the art would have not been able to make the invention and therefore claims 1 and 7 are rejected for failing to comply with the enablement requirement. Claims 3 and 4 are rejected based on their dependency on claim 1. For the purposes of this rejection, the limitation will be interpreted consistent with

Applicant's specification and the other claims which recite prioritizing data transfer based on certain criteria.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5> Claims 1, 3, 4, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jiang (U.S. Patent Number 6,898,432) in view Van Leeuwen et al. (U.S. Patent Number 6,597,906), hereinafter referred to as Van Leeuwen, in further view of Shiobara, U.S Patent No. 6,088,363.

6> Jiang disclosed a communication planning system that enables communication between mobile devices in a vehicle area network and base stations in a local area network when the mobile device is present in the station's coverage area. In an analogous art, Van Leeuwen disclosed a similar mobile communications system which is enhanced by taking into account the geographical position of the mobile clients in relation to communication dead zones. Further, Shiobara discloses a network transmission system that improves the ability to schedule data transmissions between units that are operating under an authorized transfer completion time [column 4 «lines 11-18»].

7> Concerning claims 1, 9, and 11, Jiang did not explicitly state executing an additional information transfer that can be completed within the remaining time period. In addition, Van Leeuwen's system explicitly calculates a remaining time period so that a determination can be made as to whether or not to attempt further information transfer [Figure 3B : items 310, 312, 314]. Additionally, Shiobara also discloses determining whether a remaining time period exists, the remaining time period being a period between completion of a transfer and an end of the time period [column 7 «lines 20-27»].

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Jiang by adding the ability to determine whether a remaining time period exists and execute an additional information transfer that can be completed within the remaining time period as provided by Van Leeuwen. Here the combination satisfies the need for an improved mobile communications system which overcomes the problems of wasted time and bandwidth. See Van Leeuwen, column 3, line 59 through column 4, line 6. This rationale also applies to those dependent claims utilizing the same combination.

8> Also concerning claims 1 and 11, Jiang and Van Leeuwen did not disclose means for selecting, if the remaining time period exists, an additional information transfer of a size capable of being transferred during the remaining time period. In an analogous art, Shiobara discloses relying on a limit time as a parameter for selecting additional information transfers of a size that is capable of being transferred during a remaining time period [column 5 «lines

16-24» : determining the maximum data length that can be transferred based on the remaining time allocated to the transfer]. It would have been obvious to one of ordinary skill in the art to have modified Jiang and Van Leeuwen to include Shiobara's teachings. One would have been motivated to incorporate Shiobara's selection functionality in order to optimize data delivery over networks that operate under transfer time constraints (as in Jiang and Van Leeuwen's system). Shiobara's teaching achieves such an improvement by sending only those data of the length that can be sent in the remaining time.

9> Finally, Jiang did not explicitly state predicting the time period based on both data rate and file priority [see the §112 rejection, 1st paragraph above that outlines the interpretation of this limitation]. Although Jiang discusses data rate, he is not explicit as to utilizing a file priority. However, Van Leeuwen explicitly states the use of data rate (bandwidth). Shiobara discloses transferring information based on file priority [column 6 «lines 35-39»].

It is also noted that data rate for a specific information item takes into account the file size and file priority includes an indication of importance or urgency for the item. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Jiang by adding the ability to transfer information based on both data rate and file priority as provided by Van Leeuwen and Shiobara. Again the combination satisfies the need for an improved mobile communications system which overcomes the problems of wasted time and bandwidth. See Van Leeuwen, column 3, line 59 through column 4, line 6.

10> Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a method are rejected under the same rationale applied to the described claim.

11> Thereby, the combination of Jiang, Van Leeuwen, Shiobara discloses:

- <Claims I and II>

An apparatus and a method, comprising:

means for establishing communications between a first network and a second network in proximity to the first network (Jiang, column 5, lines 19-35 and column 10, lines 50-66);

means for predicting a time period during which communications between the first network and the second network can be made (Jiang, column 10, lines 25-34);

means for transferring information between the first network and the second network so that said transferring means completes the information transfer within the time period (Jiang, column 11, lines 8-45); and

means for determining whether a remaining time period exists, the remaining time period being a period between completion of the information transfer by said transferring means and an end of the time period (Jiang, column 9, line 51 through column 10, line 3 | Van Leeuwen, column 4, lines 40-43 and column 17, lines 20-49 | Shiobara, column 7 «lines 21-27»);

means for selecting, if a remaining time period exists, an additional information transfer of a size capable of being transferred during the remaining time period [Shiobara, column 5 «lines 16-26 and 32-39»];

wherein said transferring means executes the additional information transfer that can be completed within the remaining time period (Jiang, column 9, line 51 through column 10, line 3 and Van Leeuwen, column 4, lines 40-43 and column 17, lines 20-49),

wherein said predicting means predicts the time period based on both of the following: data rate and file priority (Van Leeuwen, column 7, lines 48-57 | Shiobara, column 5 «lines 51-54»).

- <Claim 3>

An apparatus as claimed in claim 1, the first network comprising at least one of the following structures: a home network, a local area network, a wide area network, a vehicle area network, a personal area network, a fabric area network and a world wide network (Jiang, column 5, lines 19-35).

- <Claim 4>

An apparatus as claimed in claim 1, the second network comprising at least one of the following structures: a home area network a local area network a wide area network, a vehicle area network, a personal area network, a fabric area network, and a world wide network (Jiang, column 10, lines 50-66).

12> Claims 7, 13, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jiang, Van Leeuwen, and Shiobara in further in view of Pyhalammi et al. (U.S. Patent Number 6,996,393), hereinafter referred to as Pyhalammi.

13> The combination of Jiang, Van Leeuwen, and Shiobara disclosed a communication planning system that enables communication between mobile devices in a vehicle area network and base stations in a local area network when the mobile device is present in the station's coverage area. In an analogous art, Pyhalammi disclosed a content delivery system for mobile devices that optimizes delivery by using delivery classes stored in users' profiles.

14> Concerning claims 7, 13, and 21, the combination of Jiang and Van Leeuwen did not explicitly state a priority determination for prioritizing files based on a personal profile of a user or predicting the time period based on a user preference/profile. However, Pyhalammi's system utilizes a class of delivery for each piece of content that controls the time when the content is transferred. The class of delivery can be defined by the user and may be stored in a user profile. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Jiang and Van Leeuwen by adding the ability to utilize a priority determination for prioritizing files based on a personal profile of a user and the ability to predict the time period based on a user preference/profile as provided by Pyhalammi. Here the combination satisfies the need for a system whereby a user could specify the priority with which content is to be delivered to his or her wireless terminal

device. See Pyhalammi, column 1, lines 39-45. This rationale also applies to those dependent claims utilizing the same combination.

15> Thereby, the combination of Jiang, Van Leeuwen, Shiobara, and Pyhalammi discloses:

- <Claim 7>

 An apparatus, comprising:

 a local area network having at least one device communicatively coupled on said local area network (Jiang, column 10, lines 50-66);

 means for establishing communications with a vehicle area network having at least one device communicatively coupled in the vehicle area network (Jiang, column 5, lines 19-35);

 means for predicting a time period during which communications between said local area network and the vehicle area network can be made (Jiang, column 10, lines 25-34);

 means for transferring information between said local area network and the vehicle area network so that said transferring means completes the information transfer within the time period (Jiang, column 11, lines 8-45); and

 means for determining whether a remaining time period exists, the remaining time period being a period between completion of the information transfer by said transferring means and an end of the time period (Jiang, column 9, line 51 through

column 10, line 3 | Van Leeuwen, column 4, lines 40-43 and column 17, lines 20-49 |

Shiobara, column 7 «lines 21-27»);

means for selecting, if a remaining time period exists, an additional information transfer of a size capable of being transferred during the remaining time period [Shiobara, column 5 «lines 16-26 and 32-39»];

wherein said transferring means executes the additional information transfer that can be completed within the remaining time period (Jiang, column 9, line 51 through column 10, line 3 and Van Leeuwen, column 4, lines 40-43 and column 17, lines 20-49),

said predicting means predicting the time period based on the following: file size, data rate and user preference (Van Leeuwen, column 7, lines 48-57 and Pyhalammi, column 1, lines 52-67 | Shiobara, column 6 «lines 35-39»).

- <Claim 13>

A method, comprising:

establishing communications between a local area network and a vehicle area network when the vehicle area network enters a communication range of the local area network (Jiang, column 5, lines 19-35; column 10, lines 50-66; and column 11, lines 32-40);

determining a status of the vehicle and communicating the status of the vehicle to the local area network (Jiang, column 8, lines 30-50);

predicting a time period during which the vehicle area network will remain within communication range of the local area network so that communications may

occur, said predicting step being based at least in part on the vehicle status determined in said determining step (Jiang, column 10, lines 25-34);

selecting an appropriate file capable of being transferred within the time period predicted in said predicting step (Jiang, column 11, lines 13-18);

transferring the file between the local area network and the vehicle area network during the time period (Jiang, column 11, lines 8-45); and

additionally determining whether a remaining time period exists, the remaining time period being a period between execution of said transferring step and an end of the time period (Jiang, column 9, line 51 through column 10, line 3 | Van Leeuwen, column 4, lines 40-43 and column 17, lines 20-49 | Shiobara, column 7 «lines 21-27»);

if a remaining time period exists, selecting an additional file of a size capable of being transferred during the remaining time period [Shiobara, column 5 «lines 16-26 and 32-39»]; and

additionally executing said transferring step for the additional file capable of being transferred within the remaining time period (Jiang, column 9, line 51 through column 10, line 3 and Van Leeuwen, column 4, lines 40-43 and column 17, lines 20-49);

wherein the selecting of said additional file being based at least in part on a priority determination for prioritizing files based on a personal profile of at least one user so that a file having the highest priority is transferred during the first mentioned time period and a file having the second highest priority is transferred during the remaining time period (Pyhalammi, column 1, lines 52-67 and column 6, lines 46-61),

said priority determination for prioritizing files being based on both file importance and file size (Van Leeuwen, column 7, lines 48-57 | Shiobara, column 6 «lines 35-39»).

- <Claim 18>

A method as claimed in claim 13, the local area network comprising at least one of the following structures: a home network, a wide area network, a vehicle area network, a personal area network, a fabric area network, and a world wide network (Jiang, column 10, line 50 through column 11, line 7).

- <Claim 19>

A method as claimed in claim 13, the vehicle area network comprising at least one of the following structures: a home network, a wide area network, a personal area network, a fabric area network, and a world wide network (Jiang, column 5, lines 19-35).

- <Claim 20>

A method as claimed in claim 13, the local area network comprising at least one of the following structures: a gas station, a truck stop, a residence, a business establishment, a restaurant, a rest area, a tourist stop, a rental car facility, a warehouse, a theater, a service station, a parking lot, a parking garage, an event stadium, and a shopping mall (Jiang, column 10, lines 50-66).

- <Claim 21>

An apparatus, comprising:

means for establishing communications between a first network and a second network in proximity to the first network (Jiang, column 5, lines 19-35 and column 10, lines 50-66);

means for determining an amount of data to be transferred between the first network and the second network, the amount being based at least in part on a personal profile of at least one user of at least one of the first network and the second network (Jiang, column 11, lines 13-18 and Pyhalammi, column 1, lines 52-67); and

means for transferring information between the first network and the second network based at least in part on the personal profile of at the least one user, said means for transferring the information transfers the information based at least in part on a priority determination for information transfer determined by said determining means from the personal profile of the at least one user so that information having the highest priority is transferred first (Jiang, column 11, lines 8-45 and Pyhalammi, column 1, lines 52-67),

wherein the personal profile is of at least two users and wherein said means for transferring information transfers information based at least in part on a priority of a first one of the at least two users relative to another one of the at least two users determined by said determining means from the personal profiles of the first one and the another one of the at least two users (Pyhalammi, column 3, lines 18-33 and Van Leeuwen, column 6, lines 36-42 and column 15, lines 52-55), the personal profile of the at least two users including a schedule of the at least two users (Pyhalammi, column

4, lines 4-25), and said priority determination being made on data rate, file size and file importance (Van Leeuwen, column 7, lines 48-57).

Since the combination of Jiang, Van Leeuwen, and Pyhalammi discloses all of the above limitations, claims 7, 13, and 18-21 are rejected.

16> Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jiang, Van Leeuwen, Shiobara, Pyhalammi, as applied above, further in view of Lightner et al. (U.S. Patent Number 6,636,790), hereinafter referred to as Lightner.

17> The combination of Jiang, Shiobara, Van Leeuwen, and Pyhalammi disclosed a communication planning system that enables communication between mobile devices in a vehicle area network and base stations in a local area network when the mobile device is present in the station's coverage area. In an analogous art, Lightner disclosed a wireless diagnostic system for communication between mobile devices and remote host stations that are used to characterize a vehicle's performance.

18> Concerning claims 15 and 16, the combination of Jiang, Van Leeuwen, Shiobara, and Pyhalammi did not explicitly state determining the vehicle status or predicting the time period based on one of: engine status, passenger status, door status, trunk status, hood status, and fuel cap status. However, Lightner sets forth an on-board diagnostic system that tracks such variables in the vehicle and sends them back to host computers. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify

the combination of Jiang, Van Leeuwen, and Pyhalammi by adding the ability to determine the vehicle status or predict the time period based on one of: engine status, passenger status, door status, trunk status, hood status, and fuel cap status as provided by Lightner. Here the combination satisfies the need for a system that can remotely characterize a vehicle's performance or status. See Lightner, column 2, lines 49-65.

19> Thereby, the combination of Jiang, Van Leeuwen, Shiobara, Pyhalammi, and Lightner discloses:

- <Claim 15>

A method as claimed in claim 13, said vehicle status determining step including obtaining at least one of the following: engine status, passenger status, door status, trunk status, hood status, and fuel cap status (Lightner, abstract and column 6, lines 26-34).

- <Claim 16>

A method as claimed in claim 13, said time period predicting step being based on at least one of the following: engine status, passenger status, door status, trunk status, hood status, and fuel cap status (Lightner, abstract and column 6, lines 26-34).

Since the combination of Jiang, Van Leeuwen, Shiobara, Pyhalammi, and Lightner discloses all of the above limitations, claims 15 and 16 are rejected.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Ito, U.S Patent No. 5,257,406;

Diedrich et al, U.S Patent No. 6,336,143;

Ruttenberg et al, U.S Patent No. 2002|0083185;

Smith et al, U.S Patent No. 6,721,572.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942.

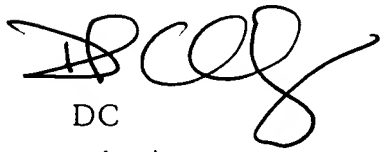
The examiner can normally be reached on Monday-Friday [8:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
09/991,090
Art Unit: 2152

Page 21

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


DC
12/18/07